

## 2014 Course Schedule

### CIVL 498C - Life Cycle Assessment

- Class Duration: September 2<sup>nd</sup> – November 28<sup>th</sup>, 2014
- Time: Wednesday 15:00 – 18:00
- Place: Frank Forward 303
- Instructor: Rob Sianchuk - rsianchuk@civil.ubc.ca – office in room 4431 in Forestry Building
- TA – Raza Jaffery – s.jaffery@alumni.ubc.ca
- Website - <http://civl498c.wikispaces.com/>

#### Course Schedule;

##### WEEK 1

Wed, September 3<sup>rd</sup>

- **Instructor-Class Introductions**
- **Lecture:** Course Overview incl. Schedule, assignments, quizzes, final project, software
- **Discussion:** Address initial questions and registration issues

##### WEEK 2

Wed, September 10<sup>th</sup>

- **Exercise:** Opening Survey
- **Lecture:** Overview of Life Cycle Assessment (LCA) basics and development
- **Assign:** Assignment #1 – Getting in the ‘know’
- **Lecture:** Final Project and Environmental Impact Estimator for Buildings
- **Assign:** Final Project Stage 1

##### WEEK 3

Wed, September 17<sup>th</sup>

- **Guest Lecture:** (LCA Client) Penny Martyn (UBC Sustainability Office)
- **Exercise:** ISO-LCA Goal & Scope Parameters
- **Lecture:** Goal and Scope
- **Lecture:** EPDs and PCRs and Critical Review

#### WEEK 4

Wed, September 24<sup>th</sup>

- **Due:** Final Project Stage 1
- **Lecture:** LCA in the Construction Industry
- **Lecture:** Final Project and Benchmarking Databases
- **Assign:** Final Project Stage 2

#### WEEK 5

Wed, October 1<sup>st</sup>

- **Quiz:** ISO-LCA Goal & Scope Parameters
- **Lecture:** Inventory Analysis
- **Exercise:** Inventory Analysis of Paper Planes and Spheres
- **Lecture:** Quantity takeoffs and Costing formats

#### WEEK 6

Wed, October 8<sup>th</sup>

- **Due:** Assignment #1 – Getting in the ‘know’
- **Due:** Final Project Stage 2
- **Discussion:** Assignment #1 articles and learning outcomes
- **Lecture:** Impact Assessment
- **Exercise:** Impact Aversion Survey
- **Schedule:** Final Project group meeting with Rob, Penny and Raza for next week (ie. week of Oct. 15<sup>th</sup>)
- **Assign:** Final Project Stage 3

#### WEEK 7

Wed, October 15<sup>th</sup>

- **Guest Lecture:** (Construction Industry) Mark Russel (LEC) on Quantity Surveying
- **Quiz:** Quantity takeoffs and Costing formats
- **Lecture:** Scaling LCA from Construction Products to Cities.

## WEEK 8

Wed, October 22<sup>nd</sup>

- **Lecture:** Uncertainty in LCA
- **Exercise:** In-class **Assignment** – Uncertainty in LCA
- **Discussion:** In-class **Assignment** results
- **Lecture:** LCA Tools, Databases and Resources

## WEEK 9

Wed, October 29<sup>th</sup>

- **Quiz:** LCA Terminology
- **Lecture:** Emerging topics in LCA
- **Discussion:** Final Report questions

## WEEK 10

Wed, November 5<sup>th</sup>

- **Lecture:** LCA in Professional Practice
- **Discussion:** Final Report questions

## Week 11

Wed, November 12<sup>th</sup>

- **\*\* Final Reports Due in Class at 3pm – CONGRATULATIONS!**
- **Discussion:** Final presentation preparations

## WEEK 12

Wed, November 19<sup>th</sup>

- **Exercise:** Final presentation preparations

## WEEK 13

Wed, November 26<sup>th</sup>

- **Exercise:** Final presentation preparations
- **Final Presentations due in class**
  - **Presentation Night TBA**